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IRON AGE

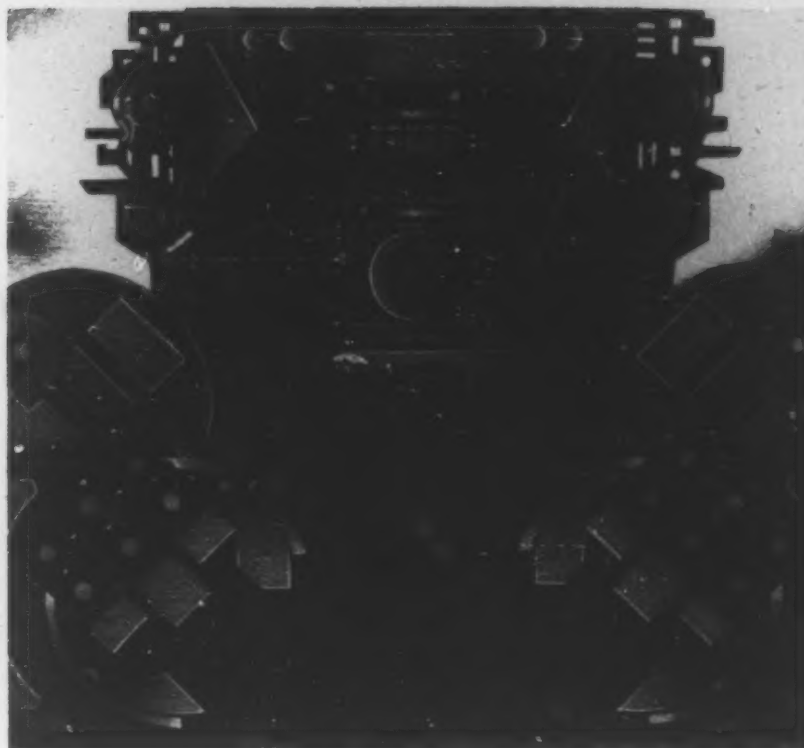
MANUFACTURING MANAGEMENT



Milestones in American Manufacturing

IRON AGE

CHILTON'S
MANUFACTURING MANAGEMENT



Editorial

An issue you can't overlook.

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Yesterday

In tracing the history of the 50 greatest manufacturing developments that provided America with its greatness, our journey begins with steelmaking and its evolution. While steelmaking was the first technology, it was not the only development that the nation would count on to propel it forward.

Along the way, men with visions of machinery and factories would add an immeasurable value to the development of the country.

And it was men like John Williams, with the wisdom and foresight to prepare the facts of important technologies as they became a part of America's historical landscape. Without them, none of what you are about to read, in this, the 130th anniversary of *Iron Age*, could have come true.

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Tomorrow

As man reaches into space and begins to explore beyond his own limits, technology will provide the rocketship to get him there.

It will become obvious that, to get to there from here, our generation and the next generations will use the best technology available.

On the following pages *Iron Age's* editorial staff examines the technologies that manufacturing executives will have to contend with in the last decade and half of this century and the 21st century, technologies that will make a difference in the way we conduct our business and determine who will succeed on this planet in the years ahead.

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Next Issue: Robotics and Automated Assembly

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ONE OF THE **ABC** COMPANIES

MATERIALS PRICES

PRICE & PRODUCTION DATA

(Effective May 13, 1985)

Steel production by districts, thousands of tons
(000 omitted)

	Last Week	Two Weeks Ago	Month Ago	Year Ago
Northeast Coast	181	185	198	247
Pittsburgh	199	211	240	298
Youngstown	108	108	112	102
Lake Erie	148	161	169	155
Detroit	153	150	146	174
Chicago	505	509	510	581
Cincinnati	86	89	107	124
St. Louis	57	50	65	89
Southern	236	220	230	238
Western	94	87	84	90
U.S. Production	1,767	1,770	1,861	2,110

Source: American Iron & Steel Institute

Lake Superior Ore Prices

51.50% Fe Natural delivered lower Lake ports. Rail transportation, handling and unloading may be charged to the account of the buyer. Coarse ore 80¢ premium.

Pellets (per iron unit natural)	gross-ton 80.50-86.9*
Mesabi, regular-unscreened	gross-ton \$32.53
Mesabi, non-bessemer	gross-ton \$30.03-31.53**

*80 x0g—Pickands Mather as of 1/27/81.

86.9g—U.S. Steel as of 3/15/82. Cleveland-Cliffs as of 2/26/82. Oglebay Norton as of 3/25/82. and Hanna Mining as of 2/26/82.

**Effective 8/1/83.

NONFERROUS PRICES

(Effective May 6, 1985) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated.

Primary Metal Prices

(cents per lb.)	current price	last price	date of change
Aluminum (LME)	51.08	50.61	5/13/85
Copper (C)	70.00-71.00	69.00-71.00	5/10/85
Lead	20.00-21.00	21.00	4/11/85
Magnesium Ingot	148.00	143.00	5/25/84
Nickel (LME)	250.87	253.23	5/13/85
Titanium Sponge	555.00-585.00	555.00	4/29/82
Zinc	46.00-47.00	45.00-47.00	5/1/85

ALUMINUM: Avg. for last week & previous week. COPPER (C) = cathode. LEAD: common grade. MAGNESIUM: 99.8% pig delivered. NICKEL: Avg. for last week & previous week. ZINC: high grade.

Antimony, American Laredo, Texas	\$2.00
Beryllium-aluminum 5% Be, per lb. contained Be	\$230.00
Beryllium-copper, per lb. cont. Be	\$144.00
Beryllium 97% powder 200	\$178.00
Cadmium, ton lots	\$125.15
Calcium, ton lots, crown	\$3.76
Chromium, 99.8%	\$3.75
Cobalt, 99%, cathode	\$321.00
Gold per tray oz.	\$2.50
Iridium, dollars per tray oz.	\$475.00
Magnesium sticks, 10,000 lbs.	\$2.02
Mercury, per 76-lb. f.o.b. N.Y.	\$303.00-312.00
Molybdenum, lb. tech. moly oxides, 20 lb. MO can	\$6.85

Nickel electro (PDCR)	\$3.29
Palladium, per tray oz.	\$113.00
Platinum, per tray oz.	\$272.00
Rhodium, per tray oz.	\$925.00
Silver ingots, per tray oz.	\$6.515
Vanadium	\$6.00
Zirconium sponge (Per lb. unless otherwise noted)	\$12.00-17.00

Straits Tin Price

(U.S. cents per lb. EX-SMELTER, based on daily market in Penang in Malaysian dollars per kilo.)

May 6—508.06	May 9—523.89
May 7—514.63	May 10—525.94
May 8—518.56	

Scrap Prices Brass Mill Scrap

(Cents per lb.; over 20,000 lbs. add 1¢ per lb.)

	Solids	Turnings
Copper	64	54 1/4
Yellow brass	57 1/2	49 3/4
Red brass	60 1/2	50 1/4
Comm. bronze	61 3/4	50 1/2
Mang. bronze	50	49
Free cutting rod ends	49 1/2	48 1/2

Custom Smelters Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	59
No. 2 copper wire	50
Light copper	41

Ingot Makers Scrap

(Cents per lb., carload lots, del. refinery)

No. 1 copper wire	55
No. 2 copper wire	46
Light copper	37
No. 1 composition	49
No. 1 comp. turnings	47
Hvy. yellow brass solids	35
Hvy. yellow brass turnings	31
Radiators	39

STEEL PRODUCTION, COMPOSITE PRICES

(Effective May 13, 1985)

U.S. Steel Production

	Last Week	Two Weeks Ago	To Date 1985	To Date 1984
Net tons, in thousands	1,767	1,770	32,683	37,101
Capacity Utilization Rate	68.9	69.0	67.6	76.0

Composite Prices

	This Week	Week Ago	Month Ago	Year Ago
Finished Steel Base* (¢/lb.—eff. 7/1/84)	27.582	27.582	27.582	26.939
Pig Iron** (Net ton = 2000 lbs.)	\$213.00	\$213.00	\$213.00	\$213.00
Scrap No. 1 hvy.*** (Gross ton = 2240 lbs.)	\$70.17	\$71.50	\$80.50	\$89.50
No. 2 bundles	\$49.17	\$50.50	\$55.50	\$60.17

Scrap Comparison (Gross Ton)

No. 1 steel, Pittsburgh	\$72.50	\$74.50	\$83.50	\$100.50
No. 1 steel, Philadelphia	69.50	71.50	78.50	82.50
No. 1 steel, Chicago	68.50	68.50	79.50	85.50
No. 1 bundles, Detroit	64.50	64.50	76.50	92.50
Low Phos., Youngstown	57.50	58.50	68.50	98.50
No. 1 mach'y cast., Pgh	71.50	71.50	71.50	79.50
No. 1 mach'y cast., Phila	91.50	93.50	93.50	100.50
No. 1 mach'y cast., Chi	108.50	109.50	111.50	117.50

*Finished Steel Composite: Weighted index of steel bars, shapes, plates, wire, rails, black pipe, hot and cold rolled sheets and strips.

**Pig Iron Composite: Based on average prices for basic and foundry pig iron at representative production points within the U.S.

***Steel Scrap Composite: Average of No. 1 hvy. melting steel scrap and No. 2 bundles delivered to consumers at Pittsburgh, Philadelphia and Chicago.

Aluminum		
New mixed clips	32	—33
Old sheet	29	—30
Old cast	29	—30
Clean dry borings	30	—31

Dealers' Scrap

(Dealers' buying price f.o.b. New York in cents per pound)

Aluminum

Segregated clippings	28	—30
Mixed L.C. clips	26	—27
Old sheets and cast	24	—25
Borings and turnings	20	—22
Duraluminum clippings	24	—25

Copper and Brass

No. 1 copper wire	45	—46
No. 2 copper wire	37	—38
Light copper	32	—33
Radiators	31	—32
No. 1 composition	40	—41
No. 1 composition turnings	37	—38
Cocks and faucets	30	—32
Clean heavy yellow brass	28	—29
Brass Pipe	28	—29
New soft brass clippings	41	—42

Lead

Heavy soft lead	6	—8
Whale batteries	1	—3
Type metal	16	—17
Electrotype	13	—15

Nickel

Nickel solids	120	—130
Nickel rod ends	120	—130
Nickel sheets, clips	120	—130
Nickel turnings	40	—45

Zinc

New zinc clippings	17	—18
Old diecast zinc	13	—14

MATERIALS PRICES

EFFECTIVE MAY 13, 1985

(Effective May 13, 1985) Prices obtained in trade based on representative tonnages per gross ton delivered to consumer unless otherwise stated. Prices are the opinions of Iron Age editors and correspondents, based on contracts with dealers, brokers, generators and users in the industry on the effective date listed above.

Ferrous Scrap Prices

Pittsburgh

No. 1 hvy. melting	\$ 72.00 to	\$ 73.00
No. 2 hvy. melting	62.00 to	63.00
No. 1 dealer bundles	82.00 to	83.00
No. 1 factory bundles (auto)	81.00 to	87.00
No. 2 bundles	56.00 to	57.00
No. 1 busheling	81.00 to	82.00
Machine shop turnings	8.00 to	9.00
Shoveling turnings	41.00 to	42.00
Cast iron borings	39.00 to	40.00
Low phos. punchings plate	90.00 to	91.00
Heavy turnings	64.00 to	65.00
Rails, 2 ft. and under	83.00 to	86.00
RR specialties	98.00 to	99.00
No. 1 machinery cast	87.00 to	88.00
Cupola cast	93.00 to	94.00
Heavy breakable cast	71.00 to	72.00
Stainless	64.00 to	65.00
18-8 bundles and solids	30.00 to	31.00
15-8 turnings	615.00 to	625.00
430 turnings	515.00 to	525.00

Chicago

No. 1 hvy. melting	\$ 68.00 to	\$ 69.00
No. 2 hvy. melting	64.00 to	65.00
No. 1 dealer bundles	79.00 to	80.00
No. 1 factory bundles (auto)	80.00 to	81.00
No. 2 dealer bundles	49.00 to	50.00
No. 1 busheling	76.00 to	77.00
Shredder scrap	76.00 to	77.00
Machine shop turnings	35.00 to	36.00
Mixed borings and turnings	36.00 to	37.00
Shoveling turnings	37.00 to	38.00
Cast iron borings	39.00 to	40.00
Low phos. forge scrap	103.00 to	104.00
Low phos. punchings plate	117.00 to	118.00
1 1/4 in. and heavier	112.00 to	113.00
Low phos. 2 ft. and under	71.00 to	72.00
No. 1 RR hvy. melting	75.00 to	76.00
Scrap rails random lgh	96.00 to	97.00
Reinforcing rails	104.00 to	105.00
Rails, 2 ft. and under	90.00 to	91.00
RR couplers and knuckles	107.00 to	108.00
RR car axles	108.00 to	109.00
No. 1 machinery cast	95.00 to	96.00
Cupola cast	94.00 to	95.00
Steel plate	84.00 to	85.00
Steel car wheels	545.00 to	555.00
Stainless	465.00 to	475.00
18-8 bundles and solids	130.00 to	135.00
15-8 turnings	100.00 to	105.00
430 bundles and solids		
430 turnings		

Philadelphia

No. 1 hvy. melting	\$ 68.00 to	\$ 71.00
No. 2 hvy. melting	58.00 to	61.00
No. 1 dealer bundles	75.00 to	78.00
No. 2 dealer bundles	40.00 to	43.00
No. 1 busheling	75.00 to	78.00
Shredder scrap	80.00 to	83.00
Machine shop turnings	25.00 to	28.00
Mixed borings and turnings	25.00 to	28.00
Shoveling turnings	37.00 to	40.00
Low phos. 5 ft. and under	78.00 to	81.00
Low phos. 2 ft. punchings	97.00 to	100.00
Electric furnace bundles	85.00 to	88.00
RR specialties	78.00 to	81.00
Rails, 2 ft. and under	100.00 to	103.00
Cupola cast	77.00 to	80.00
Heavy breakable cast	53.00 to	56.00
No. 1 machinery cast	40.00 to	43.00

Detroit

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	\$ 52.00 to	\$ 53.00
No. 2 hvy. melting	51.00 to	52.00
No. 1 dealer bundles	64.00 to	65.00
No. 2 bundles	30.00 to	31.00
No. 1 busheling	63.00 to	64.00
Drop forge flashings	42.00 to	43.00
Machine shop turnings	41.00 to	42.00
Mixed borings and turnings	18.00 to	19.00
Shoveling turnings	42.00 to	43.00
Cast iron borings	25.00 to	26.00
Heavy breakable cast	35.00 to	36.00
Mixed cupola cast	50.00 to	51.00
Automotive cast	74.00 to	75.00
Stainless		
18-8 bundles and solids	510.00 to	520.00
15-8 turnings	415.00 to	425.00
430 bundles and solids	111.00 to	125.00

Youngstown

No. 1 hvy. melting	\$ 52.00 to	\$ 55.00
No. 2 hvy. melting	40.00 to	43.00
No. 1 dealer bundles	60.00 to	63.00
No. 2 dealer bundles	29.00 to	32.00
Machine shop turnings	8.00 to	11.00
Shoveling turnings	13.00 to	16.00
Low phos. plate	56.00 to	59.00
Electric furnace bundles	53.00 to	56.00
Galvanized bundles	46.00 to	49.00

Cleveland

No. 1 hvy. melting	\$ 52.00 to	\$ 55.00
No. 2 hvy. melting	30.00 to	33.00
No. 1 dealer bundles	58.00 to	61.00
No. 1 factory bundles	59.00 to	62.00
No. 2 bundles	28.00 to	31.00
No. 1 busheling	58.00 to	61.00
Machine shop turnings	13.00 to	16.00
Mixed borings and turnings	10.00 to	13.00
Shoveling turnings	18.00 to	21.00
Cast iron borings	15.00 to	18.00
Cur structural & plates	90.00 to	93.00
2 ft. and under	90.00 to	93.00
Low phos. punchings plate	43.00 to	46.00
Drop forge flashings	69.00 to	72.00
Furnace steel, 2 ft. and under	60.00 to	63.00
No. 1 RR hvy. melting	86.00 to	89.00
Rails, 2 ft. and under	90.00 to	93.00
Rails, 18 in. and under	56.00 to	59.00
Steel plate turnings	87.00 to	90.00
Railroad cast	90.00 to	93.00
No. 1 machinery cast	55.00 to	58.00
Cupola cast	53.00 to	56.00
Stainless		
18-8 bundles	375.00 to	385.00
15-8 turnings	325.00 to	335.00
430 bundles	80.00 to	85.00

Buffalo

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	\$ 51.00 to	\$ 52.00
No. 2 hvy. melting	41.00 to	42.00
No. 1 dealer bundles	62.00 to	63.00
No. 2 bundles	32.00 to	33.00
Machine shop turnings	17.00 to	18.00
Mixed borings and turnings	17.00 to	18.00
Shoveling turnings	26.00 to	27.00
Cast iron borings	24.00 to	25.00
Low phos. plate	81.00 to	82.00
Structural and plate		
2 ft. and under	83.00 to	84.00
Rails, 2 ft. and under	65.00 to	66.00
Scrap rails random lgh	76.00 to	77.00
No. 1 machinery cast	58.00 to	59.00
No. 1 cupola cast		

St. Louis

No. 1 hvy. melting	\$ 53.00 to	\$ 54.00
No. 2 hvy. melting	40.00 to	41.00
Furnace steel, 2 ft.	50.00 to	51.00
No. 1 dealer bundles	53.00 to	54.00
No. 2 bundles	35.00 to	36.00
Machine shop turnings	14.00 to	15.00
Shoveling turnings	20.00 to	21.00
Cast iron borings	28.00 to	29.00
No. 1 RR hvy. melting	56.00 to	57.00
Rails, random length	66.00 to	67.00
Rails, 18 in. and under	72.00 to	73.00
RR specialties	71.00 to	72.00
Cupola cast	76.00 to	77.00
Heavy breakable cast	54.00 to	55.00
Steel plate	91.00 to	92.00
Steel car wheels	86.00 to	87.00
Reinforcing rails	68.00 to	69.00
Unstripped motor blocks	63.00 to	64.00

Birmingham

No. 1 hvy. melting	\$ 73.00 to	\$ 74.00
No. 2 hvy. melting	69.00 to	70.00
No. 1 dealer bundles	74.00 to	75.00
No. 2 bundles	48.00 to	49.00
No. 1 busheling	74.00 to	75.00
Shredder scrap	88.00 to	89.00
Machine shop turnings	27.00 to	28.00
Shoveling turnings	40.00 to	41.00
Cast iron borings	37.00 to	38.00
Electric furnace bundles	70.00 to	71.00
Electric furnace, 3 ft. and under	70.00 to	71.00
Structural and plate, 2 ft.	91.00 to	92.00
Structural and plate, 4 ft.	85.00 to	86.00
No. 1 RR hvy. melting	85.00 to	86.00
Scrap rails random lgh	81.00 to	82.00
Rails, 2 ft. and under	94.00 to	95.00
Angles and splice bars	86.00 to	87.00
No. 1 cupola cast	84.00 to	85.00
Unstripped motor blocks	75.00 to	76.00

Cincinnati

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	\$ 46.00 to	\$ 47.00
No. 2 hvy. melting	43.00 to	44.00
No. 1 dealer bundles	52.00 to	53.00
No. 2 bundles	24.00 to	25.00
Machine shop turnings	4.00 to	5.00
Shoveling turnings	6.00 to	7.00
Cast iron borings	13.00 to	14.00
Low phos. 18 in. and under	78.00 to	79.00
Rails, random length	57.00 to	58.00
Rails, 2 ft. and under	72.00 to	73.00
No. 1 cupola cast	55.00 to	56.00
Heavy breakable cast	22.00 to	23.00
Drop broken cast	70.00 to	71.00

New York

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	\$ 46.00 to	\$ 47.00
No. 2 hvy. melting	37.00 to	38.00
No. 2 dealer bundles	22.00 to	26.00
Mixed borings and turnings	11.00 to	13.00
Machine shop turnings	6.00 to	7.00
Shoveling turnings	14.00 to	15.00
Clean cast, chem. borings	35.00 to	36.00
No. 1 machinery cast	89.00 to	90.00
Mixed yard cast	50.00 to	51.00
Heavy breakable cast	10.00 to	12.00
Stainless		
18-8 prepared solids	520.00 to	540.00
18-8 turnings	420.00 to	440.00
430 prepared solids	90.00 to	110.00
410 solids	80.00 to	90.00

Boston

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	\$ 49.00 to	\$ 51.00
No. 2 hvy. melting	35.00 to	41.00
No. 1 dealer bundles	51.00 to	53.00
No. 2 bundles	32.00 to	34.00
No. 1 busheling	57.00 to	59.00
Shredder scrap	59.00 to	61.00
Machine shop turnings	10.00 to	12.00
Shoveling turnings	18.00 to	20.00
No. 1 machinery cast	75.00 to	80.00
Mixed cupola cast	42.00 to	44.00
Heavy breakable cast	8.00 to	10.00

San Francisco

No. 1 hvy. melting	\$ 40.00 to	\$ 42.00
No. 2 hvy. melting	34.00 to	36.00
No. 1 dealer bundles	31.00 to	33.00
No. 2 dealer bundles	18.00 to	20.00
Machine shop turnings	8.00 to	9.00
Cast iron borings	8.00 to	9.00
No. 1 cupola cast	81.00 to	83.00

Los Angeles

No. 1 hvy. melting	\$ 43.00 to	\$ 45.00
No. 2 hvy. melting	36.00 to	38.00
No. 1 dealer bundles	34.00 to	36.00
No. 2 dealer bundles	18.00 to	20.00
Machine shop turnings	13.00 to	14.00
Shoveling turnings	10.00 to	11.00
Cast iron borings	8.00 to	9.00
Elec. furnace, 1 ft. and under	74.00 to	76.00
(foundry)	75.00 to	77.00
No. 1 cupola cast		

Seattle

No. 1 hvy. melting	62.00 to	64.00
No. 2 hvy. melting	53.00 to	55.00
No. 2 bundles	14.00 to	16.00
No. 1 cupola cast	72.00 to	93.00
Mixed yard cast	2.00 to	84.00

Hamilton, Ont.

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	\$ 76.00 to	\$ 78.00
No. 2 hvy. melting	68.00 to	70.00
No. 1 dealer bundles	74.00 to	76.00
No. 2 bundles	32.00 to	34.00
Mixed steel scrap	50.00 to	52.00
Bush, new fact. prod'd	76.00 to	78.00
Bush, new fact. unprod'd	65.00 to	67.00
Machine shop turnings	33.00 to	35.00
Struct steel turnings	33.00 to	35.00
Mixed borings and turnings	20.00 to	22.00
Cast scrap	98.00 to	100.00

Houston

Brokers buying prices per gross ton on cars		
No. 1 hvy. melting	\$ 71.00 to	\$ 72.00
No. 2 hvy. melting	57.00 to	58.00
No. 2 bundles	43.00 to	44.00
Machine shop turnings	15.00 to	16.00
Crushed turnings	32.00 to	33.00
Shredder scrap	79.00 to	80.00
Cut structural plate, 2 ft. and under	99.00 to	100.00
Cut structural plate, 5 ft. and under	83.00 to	84.00
Unstripped motor blocks	60.00 to	61.00
Cupola cast	84.00 to	85.00

STEEL PRICES

PRODUCER KEY

With Principal Offices

A7 Armco Inc., Middletown, Ohio
A8 Atlantic Steel Co., Atlanta, Ga.
A11 Atlantic Wire Co., Branford, Conn.

B1 Baron Drawn Steel Corp., Toledo, Ohio
B3 Bethlehem Steel Corp., Bethlehem, Pa.
B4 Blair Strip Steel Co., New Castle, Pa.
B5 Bliss & Laughlin Steel Co., Harvey, Ill.

C6 CF&I Steel Corp., Pueblo, Colo.
C10 Copperweld Steel Co., Warren, Ohio
C16 Connors Steel Co., Birmingham, Ala.
C20 Calumet Steel Div., Chicago Heights, Ill.

D1 Detroit Strip Div., Cyclops Corp.

E4 Elliot Bros. Steel Co., New Castle, Pa.

F1 Firth Sterling, Inc., McKeesport, Pa.

G2 Granite City Steel Div., National Steel Corp., Granite City, Ill.
G3 Great Lakes Steel Div., National Steel Corp., Ecorse, Mich.
G4 Greer Steel Co., Dover, Ohio
G5 Green River Steel Corp., Owensboro, Ky.
G6 Gibraltar Steel Corp., Buffalo, N. Y.
G7 Georgetown Steel Corp., Georgetown, S.C.

H1 Hercules Drawn Steel Corp., Livonia, Mich.

I2 Ingersoll Steel Div., Newcastle, Ind.
I3 Inland Steel Co., Chicago
I4 Interlake Steel Corp., Chicago

J2 Jessop Steel Corp., Washington, Pa.
J3 Jones & Laughlin Steel Corp., Pittsburgh
J4 Joslyn Mfg. & Supply Co., Chicago
J5 Judson Steel Corp., Emeryville, Calif.

K2 Keystone Consolidated Industries, Inc.
K3 Kentucky Electric Steel Co., Ashland, Ky.
K5 Kemco Div., Foote Mineral Co., Keokuk, Ia.

L2 La Salle Steel Co., Chicago
L3 Lone Star Steel Co., Dallas
L4 Lukens, Inc., Coatesville, Pa.

M2 McLouth Steel Products Corp., Detroit
M8 Mill Strip Products Div., National Steel Service Center, National Steel Corp.
M9 Moltrup Steel Products Co., Beaver Falls, Pa.
M11 Midwest Steel Div., National Steel Corp., Portage, Ind.

N1 Northeast Precision Steel Co., Boston

N4 Northwestern Steel & Wire Co., Sterling, Ill.
N6 Northwest Steel Rolling Mills, Seattle
N9 Nelsen Steel & Wire Co., Chicago
N10 North Star Steel Co., Saint Paul, Minn.

O2 Oregon Steel Mills, Portland, Ore.

P2 Phoenix Steel Corp., Claymont, Del.
P15 Philadelphia Steel and Wire Corp., Phila.

R3 Republic Steel Corp., Cleveland
R4 Ramco Steel Co., Buffalo, N. Y.
R5 Rablin Steel Corp., North Tonawanda, N. Y.
R7 Rome Strip Steel Co., Rome, N. Y.

S1 Sharon Steel Corp., Sharon, Pa.
S7 Stanley Works, New Britain, Conn.
S8 Superior Drawn Steel Co., Monaca, Pa.
S10 Seneca Steel Corp., Buffalo, N. Y.

S16 Southern Precision Steel Co., Gulfport, Miss.

T4 Thomas Steel Strip Co., Warren, Ohio
T5 Timken Co., Steel Division, Canton, Ohio
T7 Texas Steel Co., Fort Worth, Tex.
T9 Triumph Electro Corp., Chicago
T10 Tennessee Forging Steel Corp., Harriman, Tenn.
T11 Teledyne Columbia-Summerill, Carnegie, Pa.

U1 United States Steel Corp., Pittsburgh

W3 Weirton Steel Corp., Weirton, W. Va.
W5 Wheeling-Pittsburgh Steel Corp.
W7 Wilson Steel & Wire Co., Chicago
W10 Wyckoff Steel Div., Ampco-Pittsburgh Corp., Pittsburgh
W14 Whittar Steel Strip Div., Whittar Industries, Ltd., Detroit

STEEL SERVICE CENTER PRICES

Price, Dollars per 100 lb

Prices are based on list prices reported to Iron Age by a number of metal service centers deemed representative by Iron Age and then weighted based in part on the receipts received each month. Prices are not intended to reflect the actual transaction prices obtained by any individual metal service center.

	Cities*	Sheets			Strip	Plates	Shapes	Bars		Alloy Bars			
		Hot Rolled 10 gauge	Cold Rolled 20 gauge	Galvanized 16 gauge	Hot Rolled Strip	Pipes	Standard Structurals	Hot Rolled (merchant)	Cold Finished	Hot Rolled 8620 As Rolled	Hot Rolled 4140 Annealed	Cold-Drawn 8620 As Rolled	Cold-Drawn 4140 Annealed
G2 Granite City Steel Div., National Steel Corp., Granite City, Ill.	Atlanta	26.68	32.50	33.19	31.34	25.79	22.76	19.71	31.66	34.34	50.60	69.58	73.19
G3 Great Lakes Steel Div., National Steel Corp., Ecorse, Mich.	Baltimore	26.63	30.41	35.35	36.82	32.66	28.80	22.28	36.15	51.69	56.95	63.60	69.98
G4 Greer Steel Co., Dover, Ohio	Birmingham	25.21	24.95	34.91	31.94	25.40	23.63	20.90	32.01	49.31	58.90	68.10	74.43
G5 Green River Steel Corp., Owensboro, Ky.	Boston	34.01	39.78	45.18	47.54	33.25	30.06	23.55	35.68	41.98	46.00	54.65	58.83
G6 Gibraltar Steel Corp., Buffalo, N. Y.	Buffalo	30.78	35.32	41.47	40.15	30.60	26.15	19.87	33.05	41.05	43.95	49.30	56.61
G7 Georgetown Steel Corp., Georgetown, S.C.	Chicago	28.45	35.40	37.50	29.14	23.53	20.19	17.87	27.72	32.30	41.66	46.98	52.91
H1 Hercules Drawn Steel Corp., Livonia, Mich.	Cincinnati	29.40	34.71	37.40	29.88	24.42	20.21	18.24	29.11	34.22	42.79	47.25	52.89
I2 Ingersoll Steel Div., Newcastle, Ind.	Cleveland	28.19	33.87	37.10	36.74	23.60	23.58	18.63	31.12	38.19	42.83	47.48	54.28
I3 Inland Steel Co., Chicago	Denver	31.12	37.80	35.80	37.09	27.40	24.55	20.10	38.52	50.55	57.95	65.95	70.19
I4 Interlake Steel Corp., Chicago	Detroit	29.14	35.12	37.85	29.03	24.45	20.78	17.60	29.12	34.09	42.46	47.29	53.49
J2 Jessop Steel Corp., Washington, Pa.	Houston	27.39	28.42	31.37	39.21	26.73	26.27	21.30	39.87	45.96	52.87	58.95	66.14
J3 Jones & Laughlin Steel Corp., Pittsburgh	Kansas City	30.41	36.61	39.30	34.01	27.10	23.68	17.94	33.91	39.60	45.40	49.73	54.87
J4 Joslyn Mfg. & Supply Co., Chicago	Los Angeles	26.77	31.05	37.46	33.96	28.10	32.31	26.14	37.78	50.88	57.10	63.15	70.64
J5 Judson Steel Corp., Emeryville, Calif.	Memphis	24.06	32.18	34.98	31.89	26.17	21.51	20.20	33.51	36.78	49.96	59.80	69.44
K2 Keystone Consolidated Industries, Inc.	Milwaukee	28.71	34.32	37.26	31.22	24.52	21.64	17.86	27.90	33.82	42.06	46.47	52.90
K3 Kentucky Electric Steel Co., Ashland, Ky.	New York	32.14	38.60	42.12	43.38	32.66	25.31	21.05	36.10	42.26	46.93	51.84	56.22
K5 Kemco Div., Foote Mineral Co., Keokuk, Ia.	Philadelphia	27.81	38.60	40.81	43.50	31.05	27.15	19.01	31.92	42.50	47.75	55.07	60.50
L2 La Salle Steel Co., Chicago	Pittsburgh	34.91	40.05	44.23	43.45	37.60	30.44	21.28	30.23	38.43	44.64	49.90	54.10
L3 Lone Star Steel Co., Dallas	Portland	28.67	31.75	38.34	36.56	34.65	34.78	26.78	41.54	49.78	57.74	69.73	
L4 Lukens, Inc., Coatesville, Pa.	San Francisco	26.67	31.23	36.66	34.13	27.50	30.19	25.71	38.43	50.70	57.69	63.90	70.05
M2 McLouth Steel Products Corp., Detroit	Seattle	28.00	29.81	36.28	32.95	22.02	27.02	25.69	38.87	53.03	61.70	69.75	74.63
M8 Mill Strip Products Div., National Steel Service Center, National Steel Corp.	Spokane	20.99	30.11	35.28	36.02	35.00	34.00	21.95	42.01	43.20	47.52		58.32
M9 Moltrup Steel Products Co., Beaver Falls, Pa.	St. Louis	28.81	32.25	36.97	34.59	23.89	21.73	18.18	32.05	38.12	43.51	47.85	53.69
M11 Midwest Steel Div., National Steel Corp., Portage, Ind.	St. Paul	28.58	33.27	35.25	38.36	23.81	22.48	17.74	31.95	37.52	42.72	47.09	53.31

Base Quantities: All HR products may be combined for quantity. Hot-rolled sheet, 10 ga x 36 x 96—120; Cold-rolled sheet, 20 ga x 36 x 120; Galv sheet—16 ga x 36—120; Hot-rolled strip—1 8" x 1"; Plate 1 4" x 84'; Shapes—1 Beams 6 x 12 5; Hot-rolled bar—Rounds 3 4 2 15 16; Cold finished bar—C 1018—1" rounds; Alloy bar—Hot-rolled 8620—1 5 8" round; Cold drawn—1" round; Hot-rolled 4140—1 5 8" round; Cold drawn—1" round. Check local supplier for additions or deductions from base.

*Prices at all points include metropolitan delivery charges.

STEEL PRICES

Codes identify Producers listed on p. 160. (Prices quoted are mill base prices in cents per pound unless otherwise noted and do not reflect extras or surcharges.)
N.A. = Not available.

Billets, Blooms, Slabs

(Dollars per net ton)

Carbon Re-rolling, Midwest	
W5	\$366.00
N4	\$366.00
West	
C6	\$346.00
Carbon Forging, East	
B3(2)	\$473.00
C10, U1	\$473.00
R3	\$453.00
Midwest	
R3, W5	\$453.00
U1	\$473.00
S1, I3	\$473.00
C10	\$473.00
K2	\$473.00
West	
C6	\$420.00
Alloy, East	
R3	\$492.00
B3	\$512.00
U1, C10	\$512.00
Midwest	
W5	\$492.00
U1, I3	\$512.00
C10	\$512.00
R3	\$492.00
S1	\$512.00
West	
C6	\$469.00

Structurals

Carbon, East	
B3	22.90
J3	23.90
Midwest	
C20	22.90
W8	22.90
I3, T10, N4	23.90
South	
C16	23.90
T10	22.90
High Strength, Low Alloy, East	
B3	22.90
J3	23.90
Midwest	
N4	23.90
W8	24.15
I3	23.90
South	
C16	23.90
Wide Flange, Carbon, East	
B3	22.90
U1	22.75
J3	23.90
Midwest	
U1	22.75
N4	23.90
I3	23.90
Wide Flange, High Strength-Low Alloy, East	
U1	24.30
Midwest	
U1	24.30

Strip

Hot-Rolled, Carbon, Cut II, Edge—all widths, East	
U1, B3	23.75
J3	22.05
Midwest	
D1	22.05
I4	22.85
J3, W3	22.05
G2, G3	23.45
N4	22.55
W5, S1	23.75
U1, A7	23.75
I3, B3	23.75
M2	22.05
R3	22.05

South	
R3	22.05
Cold-Rolled, Carbon Max. 25%, East*	
E4	29.75
S10	29.60
P15	24.80
B4	36.60
G6	36.175
Midwest	
I4	38.30
W14	32.80
J4	34.05
S1	37.05

High-Strength, Hot-Rolled, Low Alloy, Cut Edge & Mill Edge, All widths, (plus extras)*	
Midwest	
M2, R3	22.05
W3, J3	22.05
G2, G3	23.45
S1	23.75
A7	25.35
South	
R3	22.05
High-Strength, Cold-Rolled, Low Alloy, Mill Edge	
Midwest	
S1	37.05
Alloy, Hot-Rolled, Midwest (plus extras)*	
S1	26.10
I4	25.20
Alloy, Cold-Rolled, East (plus extras)*	
E4 M8	43.35
B4	49.75
P15	32.10
Midwest	
I4	44.30
S1	44.80

Sheets

Hot-Rolled, Carbon (18 Ga & Hxyl)	
East	
B3	23.75
J3	22.05
U1	23.75
Midwest	
M2, R3, W3	22.05
D1, J3	22.05
G2, G3	23.45
I4	22.45
U1, W5	23.75
S1, B3	23.75
I3, A7	23.75
West	
U1	24.25
South	
R3	22.05
Cold-Rolled, East, Class I	
B3(2)	28.15
J3	26.15
U1	28.15
Midwest	
R3, M2, W3	26.15
G2, G3, M11	27.85
J3	26.15
D1	26.15
U1, W5	28.15
S1, B3	28.15
I3, A7	28.15
West	
U1	28.65
South	
R3	24.65
Galvanized (hot dipped), East	
B3(2)	30.30
U1	30.30
Midwest	
J3, D1, W3	28.00
R3, Y1	28.00
G2, M11	30.00
U1, W5	30.30
S1, I3, A7	30.30
West	
U1	30.80
South	
R3	28.00
Enameling, Midwest	
U1, S1	29.65
I3, A7	29.65
J3	27.65
Long-Term, Midwest	
W5, A7, U1	31.65

R3	29.35
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Wire Rod

East	
B3(2)	22.35
Midwest	
N4, K2	22.35
U1	24.10
A7	22.00
West	
C6	21.45
South	
G7	22.35

Tinplate

Electrolytic Tinplate	
Single Reduced (70 lb)	
East	per base box
J3	26.29
U1	28.99
Midwest	
U1	28.99
J3	26.29
M11	27.54
W3	26.29
W5	28.99
West	
U1	29.49
South	
U1	28.99
Double Reduced (55 lb)*	
Midwest	
M11	21.95
J3	21.49
U1	23.38
W3	21.49
W5	23.38
West	
U1	23.88
South	
U1	23.38
Black Plate	
Single Reduced (70 lb)*	
East	
B3	24.81
Midwest	
J3, W3	24.01
I3	24.57
W5	25.55
U1	26.27
M11	26.27
West	
U1	26.27
Double Reduced (55 lb)	
East	
B3	20.49
Midwest	
W5, M11, U1	20.49
J3	18.93
W3	18.93
West	
U1	20.49
South	
U1	20.49
*75 lb—base weight extra 69¢	
**50 lb—base weight extra \$1.40	

Bars

Carbon Steel, Hot-Rolled (Special quality)	
East	
R3, K3, R5	25.80
J3	25.80
U1, C10, B3(3)	27.05
Midwest	
I4	26.00
U1, I3	27.05
R3, T10	25.80
C20, N4	25.80
K2	25.80
A7	20.25
West	
C6	24.45
South	
A8	20.65
C16	25.80
Cold-Finished Carbon, East	
A11	22.15
R3	33.75
T11, S8	31.00
J3(4), I2	31.00
M8, W10	31.00
N1	24.475

R4, B4	33.25
C10	31.00
Midwest	
W10, R3	33.25
J3	31.00
B1	33.45
L2	30.75
N9	31.00
W14	22.20
B5, M9	34.75
West	
R3	37.15
South	
J3	34.00
C16	24.40
J3	31.95
Alloy, Hot-Rolled, East	
R5, K3	27.95
R3, J3	27.95
U1, B3(2), C10	29.20
Midwest	
R3	27.95
I3, C10, U1	29.20
I4	27.35
A7	20.25
West	
C6	26.60
South	
A8	22.00
Alloy, Cold-Drawn, East	
L2	35.20
R3, N1	37.90
R4	37.10
J3, W10, I2	34.85
T11, S8	34.85
C10	34.85
Midwest	
R3	37.35
J3, W10, C10	34.85
B1	37.30
N9	34.85
L2	34.85
B5, M9	38.60
West	
R3	40.75
South	
J3	35.85
C16	28.00

Plates

Carbon Steel, East	
B3	23.25
I4, U1	25.75
P2	23.25
J3	26.75
Midwest	
B3	23.25
I3	25.75
J3, A7	22.80
U1, I4, S1	25.75
R3	26.75
West	
U1	25.75
O2	23.00
South	
R3	25.75
U1	25.75
Alloy East	
B3	31.05
U1, I4	33.55
P2	33.55
J3	34.55
Midwest	
B3	31.05
I4, U1	33.55
West	
O2	31.00
South	
U1	33.55

Wire

Carbon Steel Wire, East	
B3	27.10
A11	22.15
Midwest	
R3	24.60
N4, W7	27.40
K2	24.20
South	
A8	22.85
West	
C6	24.95